

^{36}K εp decay (342 ms) 1980Es01

Type	Author	History	Citation	Literature Cutoff Date
Full Evaluation	Jun Chen, John Cameron and Balraj Singh		NDS 112,2715 (2011)	20-Oct-2011

Parent: ^{36}K : $E=0$; $J^\pi=2^+$; $T_{1/2}=342$ ms 2; $Q(\varepsilon\text{p})=4307.2$ 4; $\% \varepsilon\text{p}$ decay=0.048 14

^{36}K - $Q(\varepsilon\text{p})$: From 2011AuZZ. Other: 4298 8 (2003Au03).

^{36}K - $\% \varepsilon\text{p}$ decay: from 1980Es01.

1980Es01: ^{36}K activity from $^{36}\text{Ar}(p,n)$ with the 20 MeV proton beam produced from the University of Jyvaskyla MC-20 cyclotron and the $19 \mu\text{g}/\text{cm}^2$ ^{36}Ar target made by a sandwich technique. Delayed particles detected with $14 \mu\text{m}$ and $26 \mu\text{m}$ fully depleted and $100 \mu\text{m}$ partially depleted Si(Au) surface barrier detectors. Measured β -delayed E_p , E_α , I_p , I_α . Deduced levels for ^{36}Ar .

Other: 1997II03.

 ^{35}Cl Levels

<u>E(level)</u>	<u>J^π</u>	<u>$T_{1/2}$</u>
0	$3/2^+$	stable

Delayed Protons (^{35}Cl)

<u>E(p)</u>	<u>E(^{35}Cl)</u>	<u>I(p)†</u>	<u>E(^{36}Ar)</u>	<u>E(p)</u>	<u>E(^{35}Cl)</u>	<u>I(p)†</u>	<u>E(^{36}Ar)</u>
501 10	0	0.7 3	9022	1874 10	0	0.23 11	10434
693 5	0	16 5	9219	1992 10	0	1.0 4	10556
849 5	0	4.0 13	9380	2048 10	0	1.0 4	10613
970 5	0	69 19	9504	2458 10	0	0.60 25	11035
1333 5	0	7.3 21	9878	2640 10	0	0.42 19	11222
1530 10	0	0.62 25	10080				

† For absolute intensity per 100 decays, multiply by 4.8×10^{-4} 14.

^{36}K ϵ p decay (342 ms) 1980Es01Decay Scheme

I(p) Intensities: Relative I(p)

